


Verification Statement For Translation

I, LEE, Yong Kyoo, hereby declare that I am conversant in the Korean and the English languages and that I am the translator of the document attached and certify that to the best of my knowledge and belief the following is a true and correct English translation of the specification contained in Korean Patent Application No. 1999-0050110.

Signature :  LEE, Yong Kyoo
Date : August 25, 2003

ABSTRACT OF THE DISCLOSURE

The present invention relates to a resin coating solution for plated steel sheet, resin-coated steel sheet and a fabricating method using the same, which are capable of co-mixing resins for lowering glass transition temperature without damaging other material properties and have an improved coating adhesion after processing by adding additives for improving coated adhesion between phenoxy resin and matrix metal.

The present invention relates to a resin coating solution for plated steel sheet having an improved coating adhesion after processing and a method for coating resin-coating solution on chromated zinc-electroplated steel sheet comprising:

- (a) an aqueous phenoxy resin solution with the number mean molecular weight of 25,000-50,000;
- (b) 2-15 phr of a melamine resin based on the phenoxy resin solution;
- (c) 10-20 phr of colloidal silica based on the phenoxy resin solution; and
- (d) 5-15 phr of aqueous ethylene-acryl resin comprising 50-80wt% of ethylene and 50-20wt% of acryl resin, with the molecular weight of 20,000-50,000, or 5~15 phr or 0.5-3.0 phr of phosphoric acid-ether based on the phenoxy solution.

The chromated zinc-electroplated steel sheet is coated with the resin coating solution by coating the resin coating solution on the steel sheet and drying it at 160-250°C to allow the thickness of dried coating to be 2-10 micrometers.